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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,825	10/01/2001	Nicole Dusch	213545US0X	3991

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EXAMINER

RAMIREZ, DELIA M

ART UNIT

PAPER NUMBER

1652

DATE MAILED: 08/12/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/965,825

Applicant(s)

DUSCH ET AL.

Examiner

Delia M. Ramirez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-30 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other:  |

## **DETAILED ACTION**

### ***Status of the Application***

Claims 1-30 are pending.

### ***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1, 2, 6-7, 9-12, drawn to a process for preparing D-pantothenic acid using a Coryneform bacteria which has an attenuated *poxB* gene, wherein said gene is that of SEQ ID NO: 12, classified in class 435, subclass 128.
  - II. Claims 1, 3, 6-7, 9-12, drawn to a process for preparing D-pantothenic acid using a Coryneform bacteria which has an attenuated *poxB* gene, wherein said gene is that of SEQ ID NO: 6, classified in class 435, subclass 128.
  - III. Claims 1, 4, 6-7, 9-12, drawn to a process for preparing D-pantothenic acid using a Coryneform bacteria which has an attenuated *poxB* gene, wherein said gene is that of SEQ ID NO: 7, classified in class 435, subclass 128.
  - IV. Claims 1, 5-7, 9-12, drawn to a process for preparing D-pantothenic acid using a Coryneform bacteria which has an attenuated *poxB* gene, wherein said gene is that of SEQ ID NO: 4, classified in class 435, subclass 128.
  - V. Claims 1, 6-12, drawn to a process for preparing D-pantothenic acid using a Coryneform bacteria which has an attenuated *poxB* gene, wherein said gene is that of SEQ ID NO: 1, classified in class 435, subclass 128.

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- VI. Claim 13, drawn to the E. coli strain DSM 13114, classified in class 435, subclass 252.33.
- VII. Claims 14-18, drawn to a process for producing D-pantothenic acid by transforming a Coryneform bacteria with a vector comprising SEQ ID NO: 3, and selecting a transformant with attenuated poxB expression, wherein said poxB gene hybridizes under stringent conditions to the polynucleotide of SEQ ID NO: 1, classified in class 435, subclass 128.
- VIII. Claims 19-21, drawn to a coryneform bacteria comprising an attenuated poxB gene, wherein said gene comprises the polynucleotide of SEQ ID NO: 12, classified in class 435, subclass 252.32.
- IX. Claims 22-27, drawn to a process for producing D-pantothenic acid by transforming a Coryneform bacteria with a vector comprising SEQ ID NO: 6 and SEQ ID NO: 7, and selecting a transformant with attenuated poxB expression, wherein said poxB gene hybridizes under stringent conditions to the polynucleotide of SEQ ID NO: 1, classified in class 435, subclass 128.
- X. Claim 28, drawn to the polynucleotide of SEQ ID NO: 6, classified in class 536, subclass 23.1.
- XI. Claim 29, drawn to the polynucleotide of SEQ ID NO: 7, classified in class 536, subclass 23.1.
- XII. Claim 30, drawn to the polynucleotide of SEQ ID NO: 12, classified in class 536, subclass 23.1.

The inventions are distinct, each from the other because of the following reasons:

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2. Inventions I and XII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the DNA of Invention XII can be used to recombinantly produce the corresponding polypeptide as well as in the process of Invention I.

3. Inventions II and X are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the DNA of Invention X can be used to recombinantly produce the corresponding polypeptide as well as in the process of Invention II.

4. Inventions III and XI are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the DNA of Invention XI can be used to recombinantly produce the corresponding polypeptide as well as in the process of Invention III.

5. Inventions I and VIII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP

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§ 806.05(h)). In the instant case the bacteria of Invention VIII can be used in the process of Invention I as well as to produce proteins which are specific to such bacteria.

6. Inventions IX and X-XI are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP

§ 806.05(h)). In the instant case the polynucleotides of Inventions X-XI can be used in the process of Invention IX as well as to recombinantly produce the corresponding proteins.

7. Inventions I-V, VII, IX and VI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the microorganism of Invention VI is neither used nor made by the processes of Inventions I-V, VII or IX.

8. Inventions II-V, VII, IX and VIII are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the microorganism of Invention VIII is neither used nor made by the processes of Inventions II-V, VII, or IX.

9. Groups VI, VIII, X-XII each comprise a chemically unrelated structure capable of separate manufacture, use, and effect. The DNA in Groups X-XII each comprises a nucleic acid sequence, whereas the bacteria of Groups VI and VIII each represent an unrelated microorganism. The DNA has other uses besides being introduced in the microorganisms of

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Groups VI or VIII, such as a hybridization probe or in gene therapy. The microorganisms of Groups VI and VIII can have other uses such as to produce proteins or metabolites which are specific to such microorganisms. Furthermore, the DNA of Groups X-XII can be prepared by other processes which are materially different from DNA amplification in the microorganisms of Groups VI or VIII, such as by chemical synthesis.

10. Inventions I-V, VII, IX are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, while Inventions I-V, VII and IX are directed to processes for preparing D-pantothenic acid, such methods are not disclosed as capable of use together, comprise different steps and/or use different products.

11. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, as shown by their different classification, restriction for examination purposes as indicated is proper.

12. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement can be traversed (37 CFR 1.143).

13. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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14. Applicants are requested to submit a clean copy of the pending claims (including amendments, if any) in future written communications to aid in the examination of this application.

15. Certain papers related to this application may be submitted to Art Unit 1652 by facsimile transmission. The FAX number is (703) 308-4556. The faxing of such papers must conform with the notices published in the Official Gazette, 1156 OG 61 (November 16, 1993) and 1157 OG 94 (December 28, 1993) (see 37 CFR 1.6(d)). NOTE: If Applicant submits a paper by FAX, the original copy should be retained by Applicant or Applicant's representative. NO DUPLICATE COPIES SHOULD BE SUBMITTED, so as to avoid the processing of duplicate papers in the Office.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Delia M. Ramirez whose telephone number is (703) 306-0288. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Ponnathapura Achutamurthy can be reached on (703) 308-3804. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

Delia M. Ramirez, Ph.D.  
Patent Examiner  
Art Unit 1652

DR  
August 8, 2003



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